REMARKS

Claims 17, 20 and 22-33 currently appear in this application. The Office Action of April 30, 2008, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicant respectfully requests favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

Interview Summary

Applicant's attorney wishes to thank Examiner McNally of the courtesies extended during one interview of September 29, 2008.

During the interview Examiner McNally proposed amending claim 17 to incorporate the limitation of claim 19. Neither Holmes nor Chen suggests teaches using laser energy of welding and a secondary energy selected from UV or IR radiation.

Rejections under 35 U.S.C. 112

Claims 17, 20 and 22-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that applicant regards as the invention.

This rejection is respectfully traversed. Claim 17, and thus the claims dependent therefrom, has been amended in accordance with the Examiner's helpful suggestion.

Art Rejections

Claims 17, 20 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al., US 2003/0213552 in view of Holmes et al., US 6,451,152.

This rejection is respectfully traversed. The two laser beam sources in Chen are described in Figure 2 and explained in paragraph 0010. In Chen, a second point-like laser beam follows the linear irradiation zone of the first laser beam. That is, a further heating within the welding method of Chen occurs **after** the welding partners are irradiated by the first main laser beam. According to paragraph 0010 of Chen, this is to provide **additional** energy for the welding operation for the welding operation after the melting temperature has been reached. This means that the basic welding process has already begun when the second laser mean hits the welding zone. Accordingly, when the first laser beam enters the welding zone there are no means taught by Chen that serve for a temperature increase of the Transmissive join partner, thus failing to fulfill the aims and objects of the presently claimed process.

In the process claimed herein, the laser welding beam hits the laser absorptive join partner serving to melt this partner and by heat transfer to the transmissive partner in the welding process. In contrast to Chen, the secondary radiation, which is IR or UV radiation does not serve to provide additional energy for the

welding operation after the melting temperature has been reached, but to provide a homogeneous temperature field within the welding partners. This is explained in detail at page 4, paragraph 3 and by the comparison discussed in connection with Figures 3 and 4 (specification page 8, line 11 through page 9, line 9). This homogenization is clearly recited in claim 17.

Holmes adds nothing to Chen, because Holmes does not relate to welding thermoplastic molded articles, but merely relates to heating and controlling the temperature of composite materials comprising a substrate and layers made of tapes on the substrate. While Holmes teaches softening the tapes to promote adhesion of the tape to the substrate, there is no mention of welding. The "optimization of the temperature profile" in Holmes means that the profile of the laser intensity across the width of the tape, for example, is varied as a function of the path along with the tape is steered during placement on the substrate (column 2, lines 32-35), or a light filed is produced whose width generally matches the bandwidth of the tape. Figures 9 through 13 clearly show that the laser illumination is controlled based upon the geometric conditions of the placement region. Holmes says nothing about a secondary laser beam which, contrary to the primary laser beam, heats the join partner whose temperature is not increased by the laser beam. This is not a secondary radiation, as it is the same

type of radiation as the laser beam from the remaining laser diodes.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

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